TRANSACTIONS

OF THE

NEW YORK SURGICAL SOCIETY.

Stated Meeting, May 27, 1903.

The President, Lucius W. Hotchkiss, M.D., in the Chair.

PENETRATING SHOT WOUND OF THE LUNG.

Dr. L. W. Hotchkiss presented a man, thirty-five years old, who on April 28, 1903, at five o'clock in the morning, was shot three times with a .38-caliber revolver. Fifteen minutes after the receipt of his injury he was brought to the hospital. He was in a condition of extreme shock, and was immediately put to bed, stimulated, and given a subcutaneous saline infusion. Examination showed a contusion and abrasion, about an inch long, over the right anterior spine of the ileum. A second bullet had passed through the upper third of the right forearm. The third bullet was embedded in the chest, its point of entrance being through the gladiolus, one inch above the ensiform cartilage.

Within two hours after the patient's admission, a large bulging hæmatoma had developed over the right side of the chest, in the region of the eighth rib. It measured four by six inches then, and slowly increased in size, its long diameter being parallel with the ribs and its centre in the midaxillary line. The patient complained of a feeling of oppression, and said he had difficulty in breathing. When Dr. Hotchkiss saw him, about two hours after his admission, he was still in a condition of shock, but the hæmorrhage had apparently ceased and he seemed to be slowly improving. About noon he vomited some blood. About four o'clock in the afternoon, under gas and ether anæsthesia, an exploratory laparotomy was done. An incision two and one-half inches long was made in the median line, two inches below the ensiform cartilage. There was no free blood in the peritoneal

cavity. The stomach and intestines were moderately distended with gas. The cardiac end of the stomach was found to be normal; the pyloric end was much congested. There was no perforation of either the stomach or intestines. When this fact had been determined, the abdominal wound was closed in the usual way.

An incision seven inches long was then made over the eighth rib, through the enormous hæmatoma which had developed in that region, and a large amount of clots liberated. Two inches of the seventh rib and about four inches of the eighth were resected in the midaxillary line. The latter rib had been perforated and shattered by the bullet. The pleural cavity was freely opened and found to contain a large amount of fluid blood and clots, but the hæmorrhage from the perforation of the lung had evidently ceased. The lower and middle lobes of the collapsed lung could be plainly seen, and it was thought, also, that the point of perforation in lung could be made out. There was also noted an abraded area over the dome of the diaphragm evidently made by the bullet. After washing out the pleural cavity with hot salt solution, the edge of the lower lobe of the lung was sutured to the parietal pleura at the posterosuperior margin of the wound, and the posterior portion of the wound was closed. Loose sterile gauze packing was inserted into the wound, but not extending into the pleural cavity. The outer dressings were changed daily on the three days following the operation. They were slightly stained with an orange-colored discharge. When the packing was removed on the second day, the pleural cavity was found to be still open, as determined by the air which was sucked in. The wound was again lightly packed with gauze. Two days later the pleural cavity was apparently closed off by wound contraction and lung expansion, and it never opened subsequently. The wound granulated from the bottom, and was strapped. The further recovery of the patient was uneventful, except for marked abdominal distention and some vomiting in the first forty-eight hours, and he was discharged cured on May 19, 1903. There was no wound suppuration, and no empyema developed. The lung expansion is now apparently normal. The bullet can be felt under the skin near the inner edge of right scapula.

Dr. George Woolsey said it had not been his experience

that all cases of this kind treated expectantly had developed an empyema. He had treated quite a number of cases in that way, and fully 50 per cent. did not develop an empyema. They developed a hæmothorax and some signs of pleurisy, but went on to complete recovery under a simple expectant treatment. In a recent case that recovered under that method of treatment there were evidences of injury to the heart as well as the left lung, and a well-marked pericarditis developed.

Dr. Alexander B. Johnson said he had seen one or two instances where a shot wound of the thorax was treated expectantly without the subsequent development of empyema. In one of them, which he saw at Bellevue Hospital, the injury was followed by a moderate amount of pleurisy and fluid in the chest, but recovery took place without further symptoms. The speaker said he was convinced, however, that empyema would occur more frequently after the expectant method of treatment than where an open operation was done.

Dr. Hotchkiss, in closing, said that in his hospital experience nearly all the cases of penetrating shot wound of the thorax treated expectantly had developed empyema. He remembered one exception, however, that of a man who was shot apparently through the heart; at least, he was shot where his heart ought to have been. He was cyanotic and dyspnœic, almost apnœic and pulseless. The case was regarded as hopeless and nothing was done; but the man had recovered under expectant measures and there was no subsequent empyema. The judgment and nerve of the surgeon are often sorely taxed on these cases, but he thought there could be no question but that operation in many of them was a conservative and perfectly logical procedure.

MASTOID ABSCESS; THROMBOSIS OF THE LATERAL SINUS; EPIDURAL ABSCESS.

Dr. Hotchkiss presented a young man of twenty-five years, who was admitted to the hospital March 29, 1903, suffering from pain in his right ear, intense headache, dizziness, and an irregular fever. He gave a history of chronic ear suppuration for several years, with acute attacks of pain from time to time. His present illness began about two weeks before admission, with pain in the right ear and slight purulent discharge. After continuing for five days the discharge stopped, but the pain increased.

On admission his temperature was 99.6° F.; pulse, 100; respiration, 24. He complained of nausea, dizziness, and of intense pain in the ear and side of head. There was well-marked tenderness over the right mastoid process, a purulent discharge from the ear, and his expression was rather stupid. He was at once prepared for operation. Under ether anæsthesia an incision was made exposing the mastoid; the antrum was opened and connection with tympanum established. The cortex of the bone was removed and the mastoid cells down to the tip cleaned out. The sinus was deliberately exposed, and, although there was pus around it, a puncture with a small hypodermic needle withdrew fluid blood. After a thorough curettage of dead bone, the whole cavity was packed with gauze and a few sutures applied. This operation gave some relief, but the temperature ran a septic course and the intense headaches persisted. Accordingly, two or three days later the original incision was prolonged upward and forward, a flap turned back, and a trephine opening made into the cranial cavity above the temporal ridge. A small epidural abscess was found. This was evacuated, and the bone chiselled through so that it communicated with the wound below, and the abscess cavity drained. The sinus was again aspirated and fluid blood again withdrawn.

In spite of this second operation, the patient's condition was not entirely satisfactory, the septic symptoms still persisting. The lateral sinus was repeatedly tapped, and it was always found to contain fluid blood. Finally, as the wall of the sinus appeared necrotic and shrunken, he made an incision in the neck, exposed the internal jugular vein, and, after ligating it, opened and packed the lateral sinus, which contained a number of soft clots and its walls were necrotic.

After this third operation, the patient's recovery was uneventful, although he still has a small sinus which communicates with the middle ear. This sinus has since entirely closed.

CARCINOMA OF THE GALL-BLADDER.

Dr. Alexander B. Johnson presented a man, forty-four years old, who was apparently perfectly well until the first part of last winter. He had always led an active, out-of-door life. Shortly before Christmas he began to suffer pain in the region of the gall-bladder. The pain was more or less continuous, with

decided exacerbations. Subsequently, he began to suffer from attacks of vomiting; his digestion became impaired, and he began to run down in health. When he entered the hospital April 4, 1903, he had lost thirty-four pounds in weight; he was quite anæmic and markedly jaundiced. An examination of the blood showed a slight leucocytosis.

The absence of very acute attacks of pain, the more or less continuous character of the pain, and the deterioration in general health led Dr. Johnson to suspect that the case was one of malignant disease of the biliary passages or of the pancreas rather than one of stone in the common duct or of ordinary cholecystitis. No tumor could be made out in the region of the gall-bladder.

April 6, 1903, the gall-bladder was exposed through a four-inch incision. It was rather deeply situated and considerably distended, but not adherent. Upon palpation, one could feel that the third or half of the gall-bladder away from its fundus was occupied by a tumor of considerable size. In order to determine the character of this tumor, a hypodermic needle was introduced, which passed readily through the tumor mass.

The complete removal of the gall-bladder was attended with some difficulty on account of hæmorrhage from the liver, in which the gall-bladder was rather deeply embedded. The bleeding was very free, and had to be controlled by temporary packing. After removal of the entire gall-bladder, together with the malignant growth, down to a point opposite the hepatic artery, the wound in the liver was packed and a small drainage tube inserted.

After removal, the gall-bladder was opened. There was considerable thickening of its walls, and that half of the organ away from the fundus was occupied by the malignant growth; the fundus did not seem to be involved. The gall-bladder contained a few minute stones. The diagnosis of carcinoma could be made with comparative certainty from the gross appearance of the tumor. The patient made an uneventful convalescence. He had gained over twenty-five pounds since the operation, and there were no evidences of any secondary growths.

Dr. Lilienthal said he had never seen a case of carcinoma of the gall-bladder without the presence of stone, and he thought such an occurrence would be very unusual. As a rule, carcinoma developed in a contracted bladder that had held a stone for a long time, and usually in elderly people. His favorite incision in

these cases was the one which Dr. Johnson had employed, namely, between the fibres of the rectus. He thought any gall-bladder could be reached through such an incision, and was surprised to learn from witnesses and from Riedel's latest book that in Germany the enormously long incisions were still favored. Mikulicz, during a recent visit to Mt. Sinai Hospital, had told the speaker that he was not in favor of the long preliminary incision. Riedel favors a preliminary incision of from thirty to thirty-five centimetres, and states that if necessary another incision can be made inward, completing a trap-door flap.

Dr. Johnson said it had always seemed to him that a very large incision in gall-bladder work was rather a disadvantage than otherwise. With a moderate-sized incision it was easier to keep the viscera out of the way, while with a very large incision it was necessary to put in a great many pads. Furthermore, with a large incision the amount of shock was greater, the wound required more manipulation, and it lengthened the time of the operation. In operating on the kidney, either for the purpose of removing the organ or even for the removal of stone in the kidney, Dr. Johnson said he was in favor of a pretty large incision parallel to the ribs. This enables the operator to see what he is doing; it brings the pedicle into view, and there is no difficulty in ligating the vessels.

REMOVAL OF THE SCAPULA FOR SARCOMA.

Dr. H. Lilienthal presented again a patient who was first shown by him at a meeting of the Society several months previously. It was presented then as a case of small round-celled sarcoma of the right scapula, which had apparently greatly diminished in size under the use of the X-ray and injections of Coley's fluid, the treatment being continued over several months. A few days after that meeting, signs of a recurrence of the growth became manifest, and the entire scapula, with the exception of the glenoid process, was removed. At the next meeting of the Society, the specimen had been presented.

About two months had elapsed since the operation. The wound healed by first intention, and the patient made an uninterrupted recovery. On account of the fact that there was considerable pigmentation and thickening of the skin as the result of the X-ray treatment, one of the gentlemen who discussed the

case at the previous meeting suggested that the operation might be followed by gangrene of the skin, but such a complication did not occur in this instance.

THE DIAGNOSIS AND TREATMENT OF ACUTE PANCREATITIS.

DR. GEORGE WOOLSEY read a paper with the above title, for which see ANNALS OF SURGERY for November.

DR. LILIENTHAL referred to a case of acute pancreatitis which he had presented to the Society about five years ago. The patient was a man of fifty-two years, who had always been temperate in his habits. For three or four days before coming under observation, he had complained of symptoms which were looked upon as the result of an extremely acute attack of suppurative cholecystitis. When he was brought to the hospital he was cyanotic, and his general condition was such that recovery seemed out of the question. A large incision was made beside the right rectus, which revealed the fact that the gall-bladder was practically normal. The omentum and mesentery, especially the latter, were studded with large and small whitish plaques, perfectly circular in outline. One of these was excised and examined, and it proved to be a typical fat necrosis. The pancreas was thereupon exposed, and its head was found to be enormously enlarged, fully as large as an adult fist, and very firm and elastic. An aspirating needle was inserted, and fully two ounces of pure fluid withdrawn. At this stage of the operation the patient's condition became so critical that the wound was closed as rapidly as possible.

The man recovered, but he subsequently developed a ventral hernia, for which he was operated on by Dr. Lilienthal a week ago. The pancreas was palpated and found to be surrounded by numerous adhesions. Both the pancreas and gall-bladder were apparently of normal size. The head of the pancreas, which at the time of the first operation was enormously enlarged, had regained its normal size.

Dr. Lilienthal said he agreed with Dr. Woolsey that acute pancreatitis was undoubtedly a surgical disease, but he did not agree with him that the condition was easily recognized. On the contrary, as far as our present knowledge went, it was difficult to recognize. It might be mistaken for either acute intestinal obstruction or acute cholecystitis. Dr. Gerster had recently oper-

ated on a case of apoplexy of the pancreas, but the condition was not recognized until the abdomen was opened; until that time the trouble was supposed to be in the kidney. The actual number of cases of acute pancreatitis in which the condition had been recognized prior to operation was very small. Nevertheless, the picture presented in all these cases was one of acute, grave intra-abdominal lesion, and operative interference was indicated.

Dr. John F. Erdmann said that in one case that had been diagnosticated as acute cholecystitis he opened the abdomen and found 2060 small stones in the gall-bladder. The mesentery was studded with many small, white, rounded plaques, which proved to be areas of fat necrosis. The abdominal cavity was filled with a brownish-colored fluid resembling beef broth. The patient died within thirty-six hours.

Dr. Erdmann said that while we were gradually learning more about this condition of acute pancreatitis, its diagnosis could not be regarded as easy. Among other conditions, it was difficult to distinguish it from ultra-acute appendicitis and acute cholecystitis.

Dr. L. W. Hotchkiss reported the following case of acute pancreatitis, which, prior to operation, was simply recognized as one of probable peritonitis of unknown origin. The patient was a young woman who had been recently confined. So far as could be learned, her confinement had not been followed by any septic complication. She was suddenly seized with pain, vomiting, and symptoms of intestinal obstruction, with considerable abdominal distention, and in this condition she was brought to the hospital. The case did not seem like one of appendicitis.

Upon opening the abdominal cavity it was found to be filled with fluid, seropurulent in character and mixed with flakes of fibrin. Upon washing this out the omentum and mesentery were found to be studded with little white plaques, which proved to be areas of fat necrosis. After washing out the abdominal cavity thoroughly with salt solution, the wound was closed. After several days of very severe illness, during which her symptoms, *i.e.*, pain and tenderness, seemed to localize in the epigastrium and left hypochondrium, the patient recovered. She left the hospital perfectly well and has remained so.

Dr. Woolsey, in closing, said that pronounced cyanosis had

been seen in some cases of acute pancreatitis, but not in all. In his own cases, the symptom was not pronounced. The pulse was rather more rapid and the condition of collapse more marked than in fulminating appendicitis.

Dr. Woolsey said he did not claim that the diagnosis of acute pancreatitis was an easy matter. In the severe acute forms it was less difficult than in the less acute or subacute forms. In a certain proportion of cases the diagnosis was fairly probable, and if, after incision, areas of fat necrosis were discovered, the diagnosis could be regarded as positive. In two cases seen by Dr. Bevan, of Chicago, the pancreas was not noticeably enlarged. Fat necrosis was almost invariably due to disease of the pancreas.